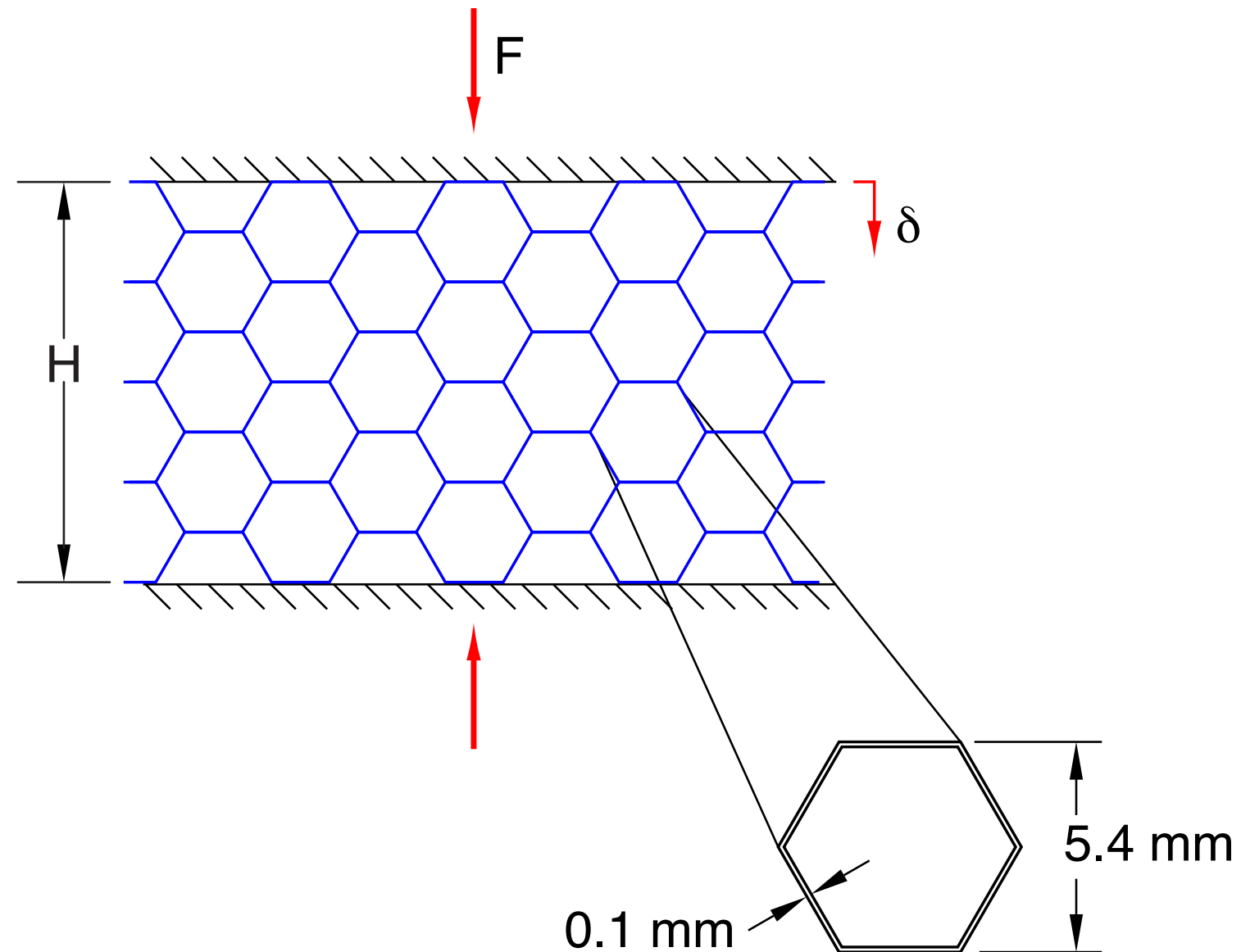
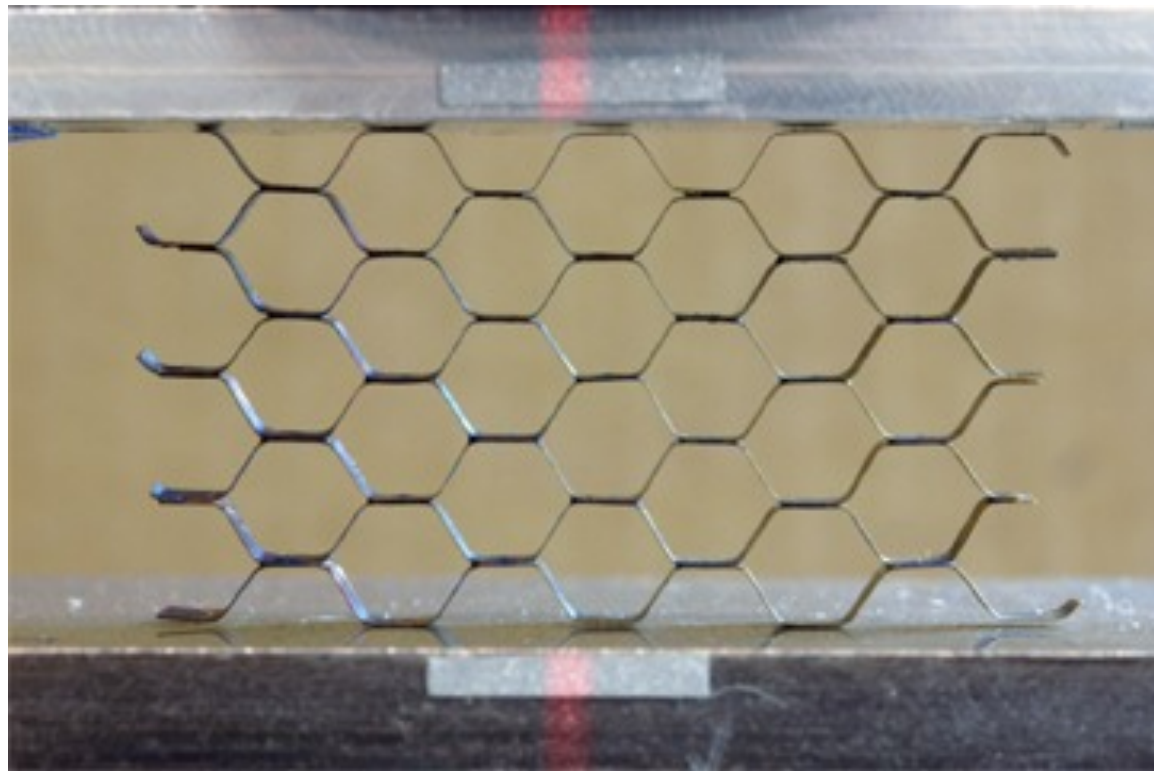


# Experimental Characterization

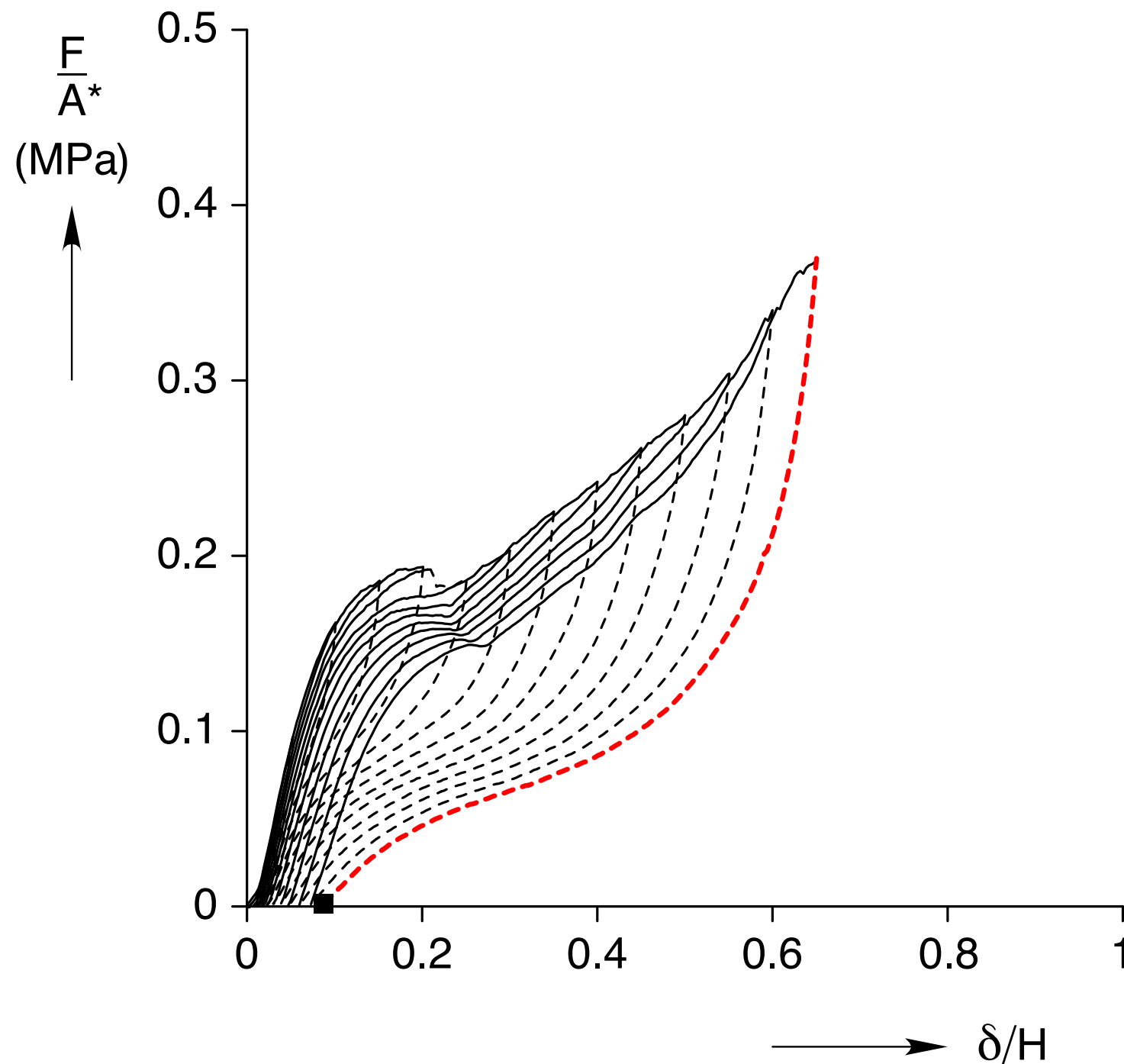


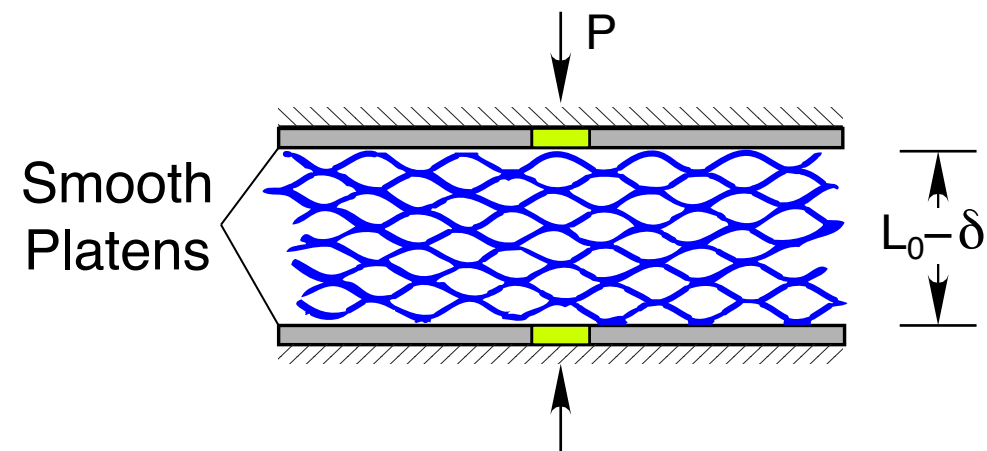
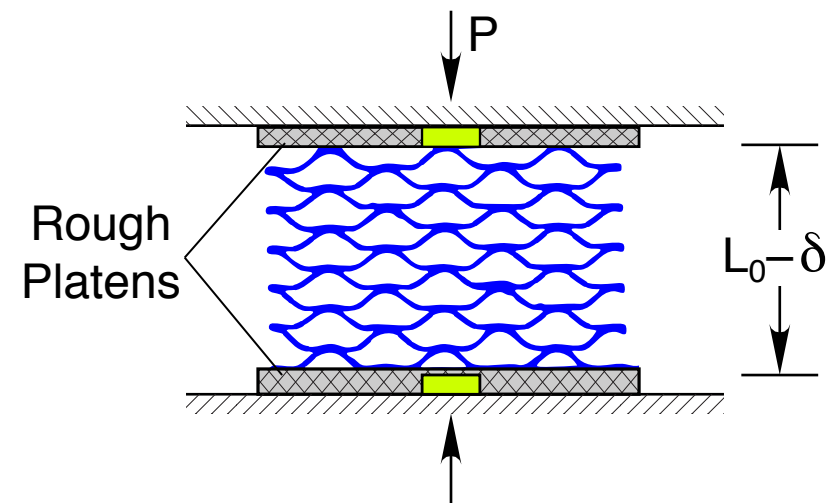
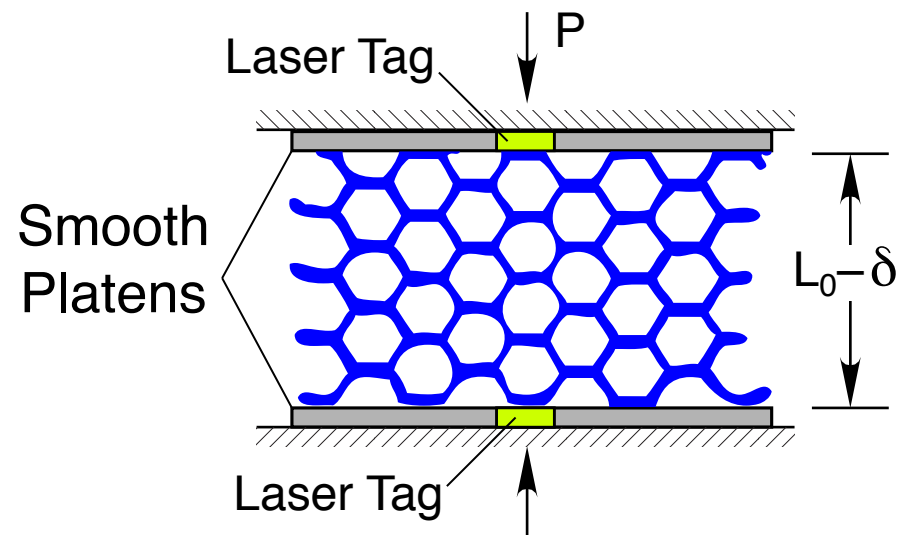
Report Documentation Page				Form Approved OMB No. 0704-0188	
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1. REPORT DATE <b>AUG 2012</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2012 to 00-00-2012</b>	
4. TITLE AND SUBTITLE <b>Experimental Characterization (Part 2)</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>University of Michigan, Ann Arbor, MI, 48109</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>Presented at the 2nd Multifunctional Materials for Defense Workshop in conjunction with the 2012 Annual Grantees'/Contractors' Meeting for AFOSR Program on Mechanics of Multifunctional Materials &amp; Microsystems Held 30 July - 3 August 2012 in Arlington, VA. Sponsored by AFRL, AFOSR, ARO, NRL, ONR, and ARL. U.S. Government or Federal Rights License</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT  <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES  <b>8</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

# Superelastic Experiment (room temperature)

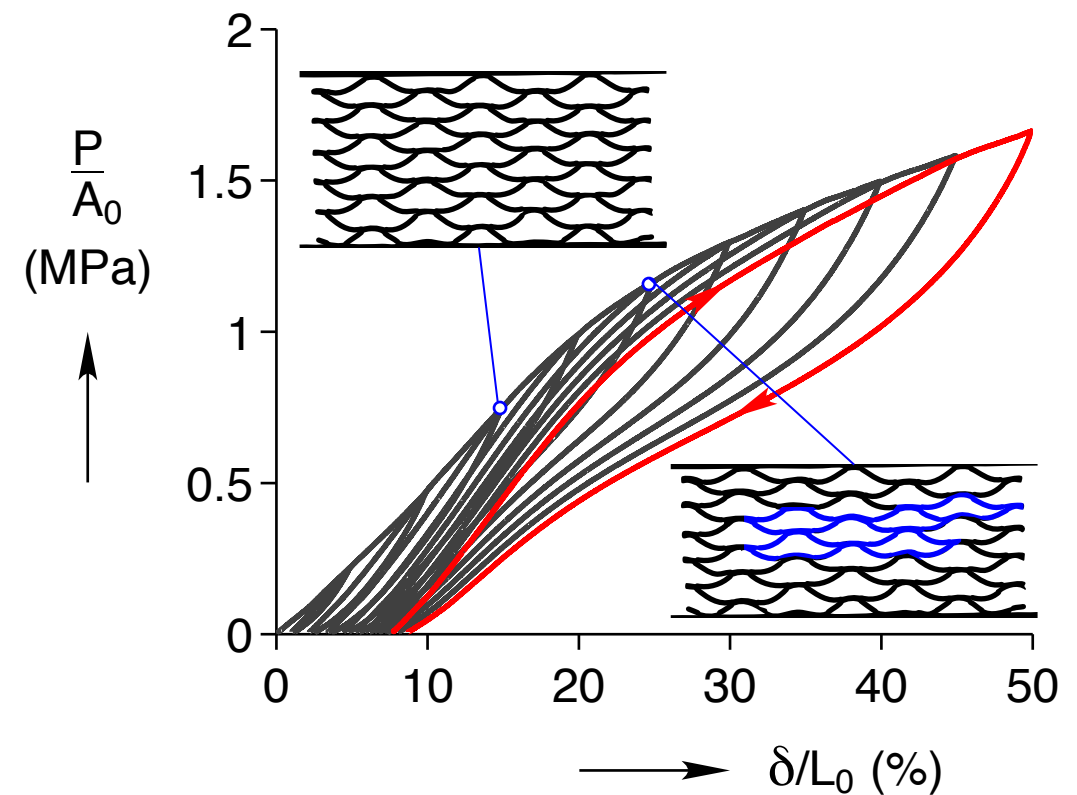
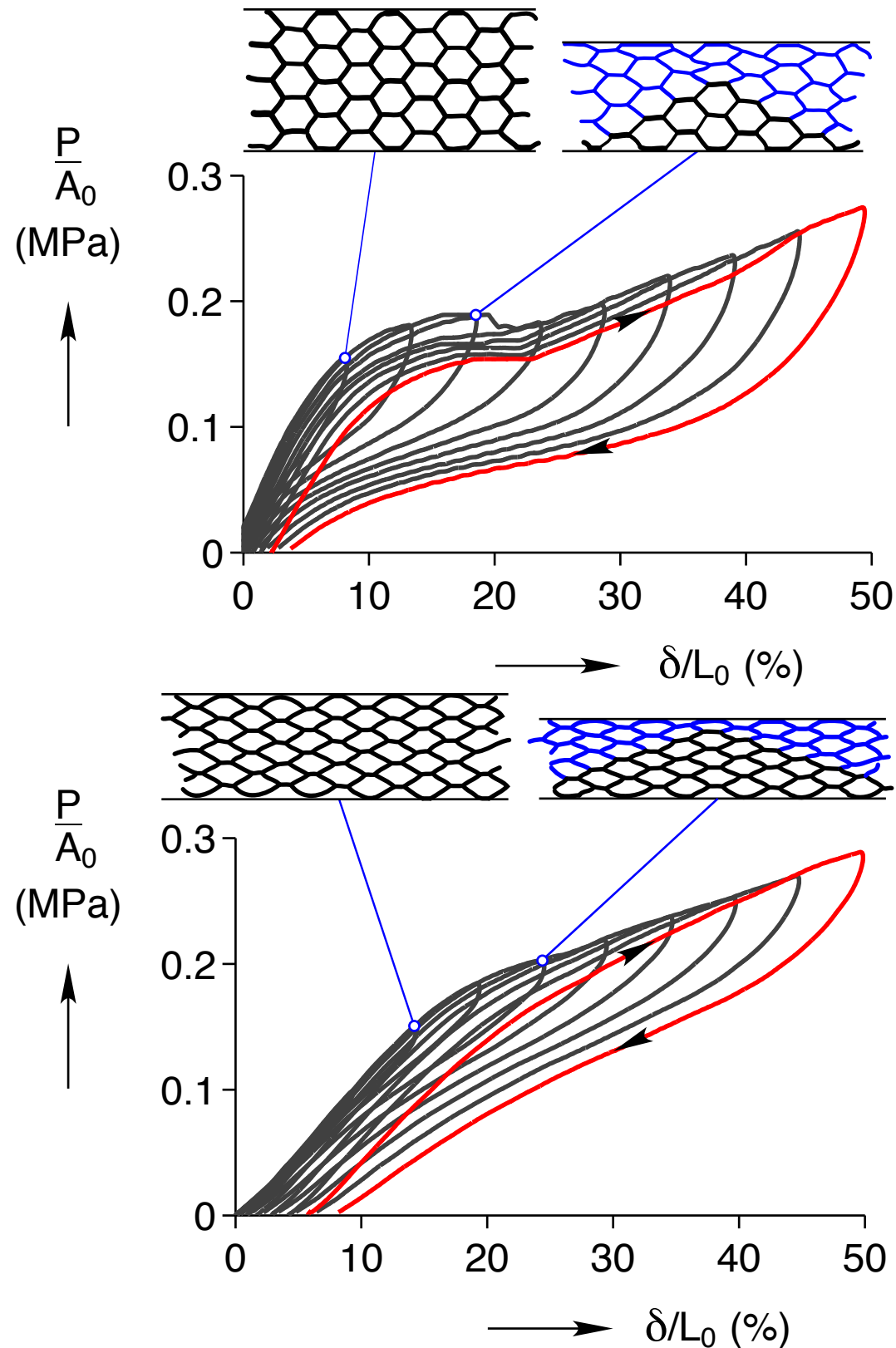


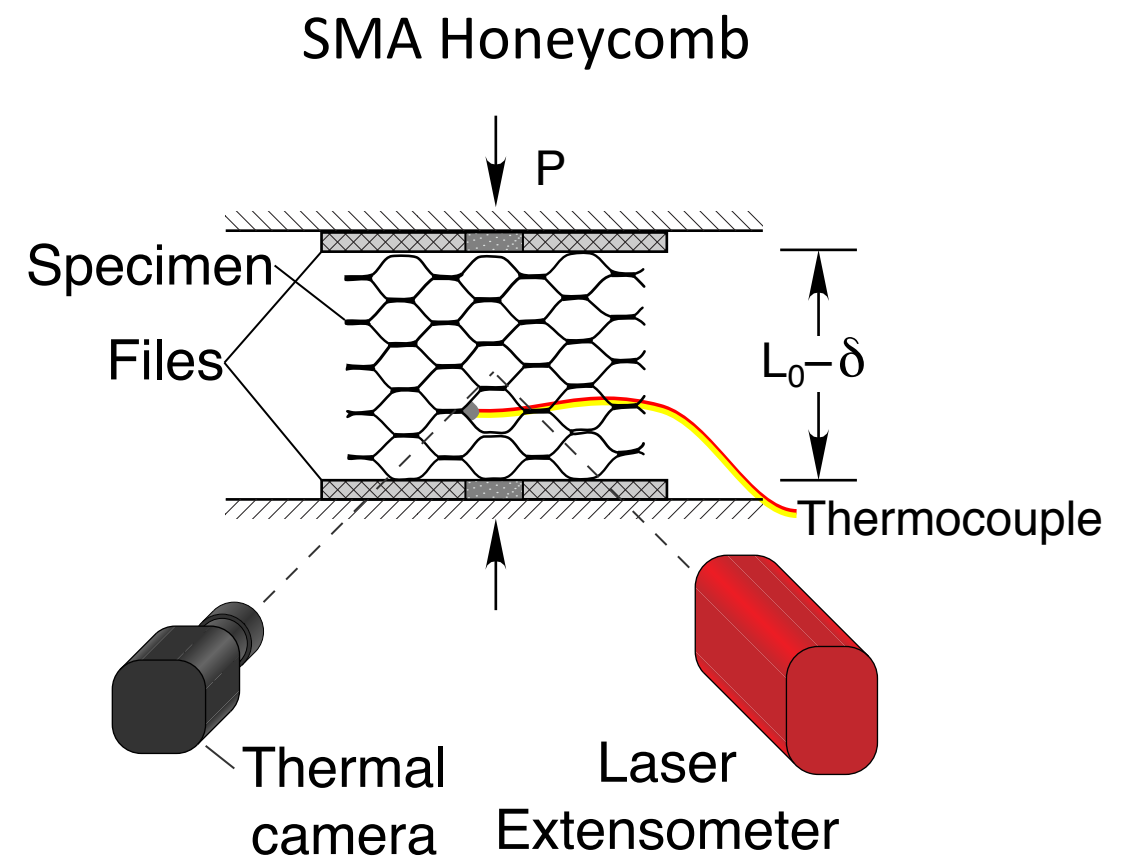
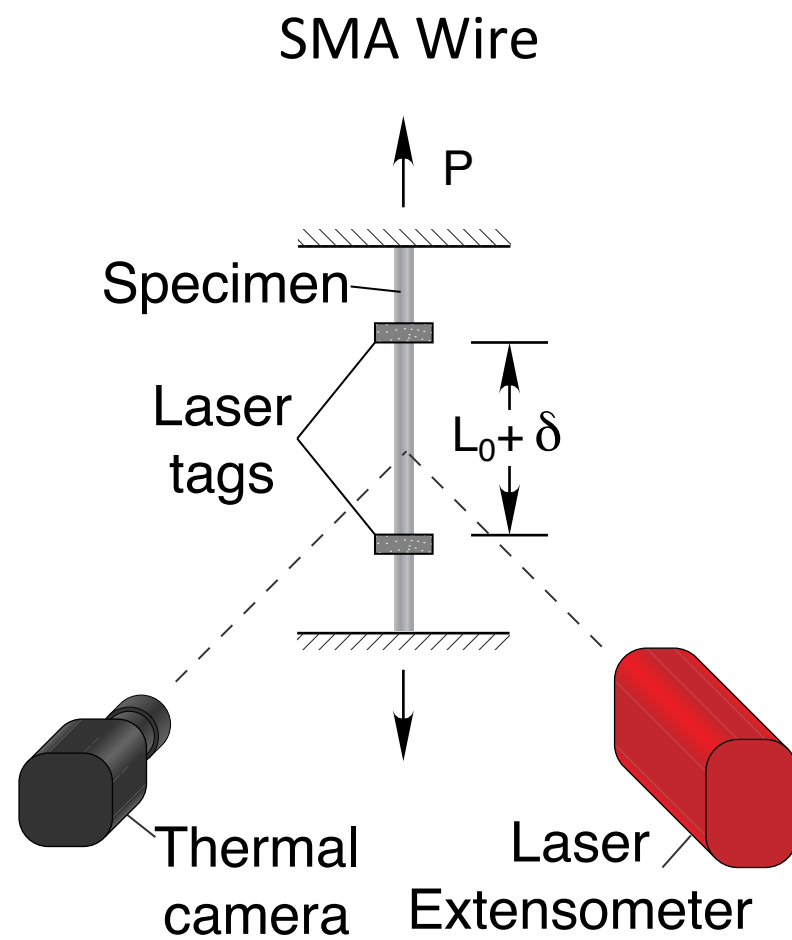
# RT superelastic experiment



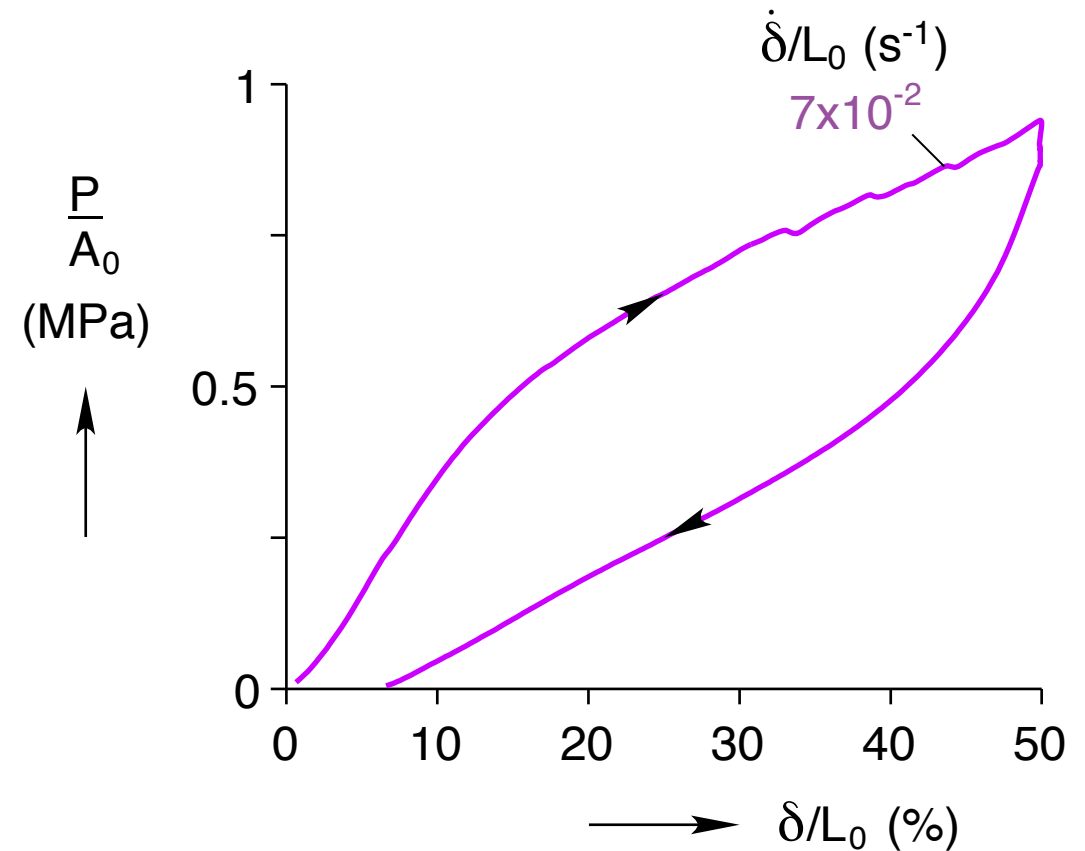
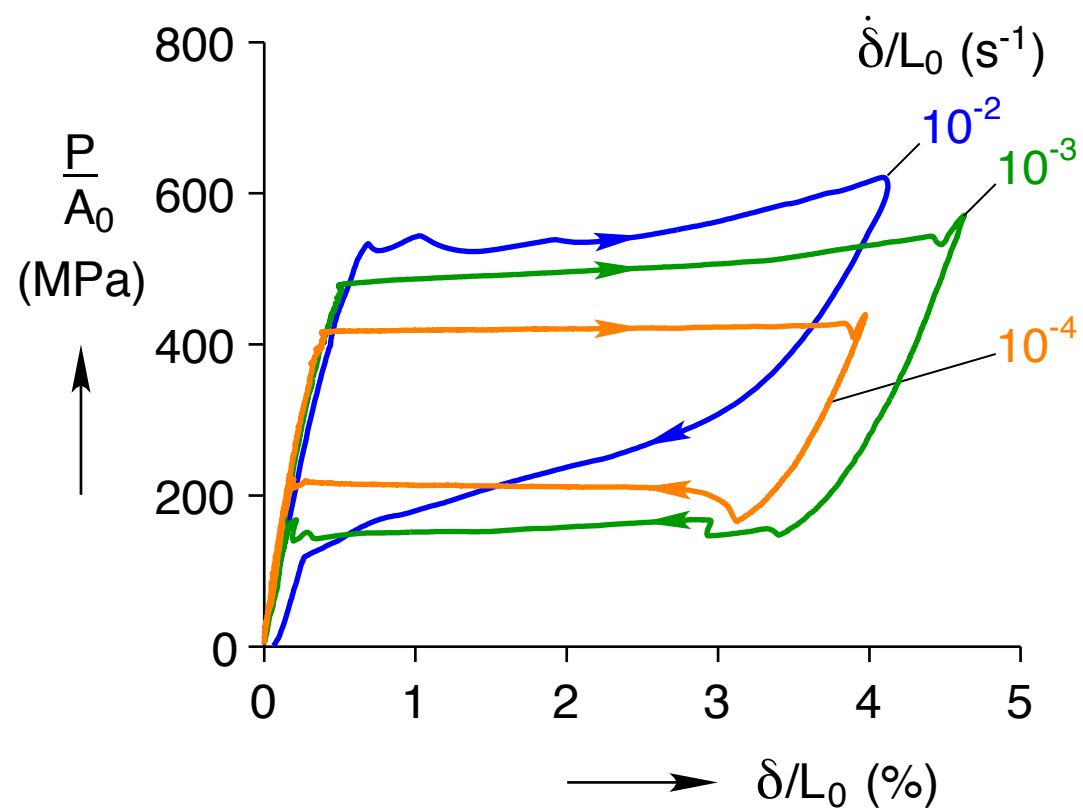
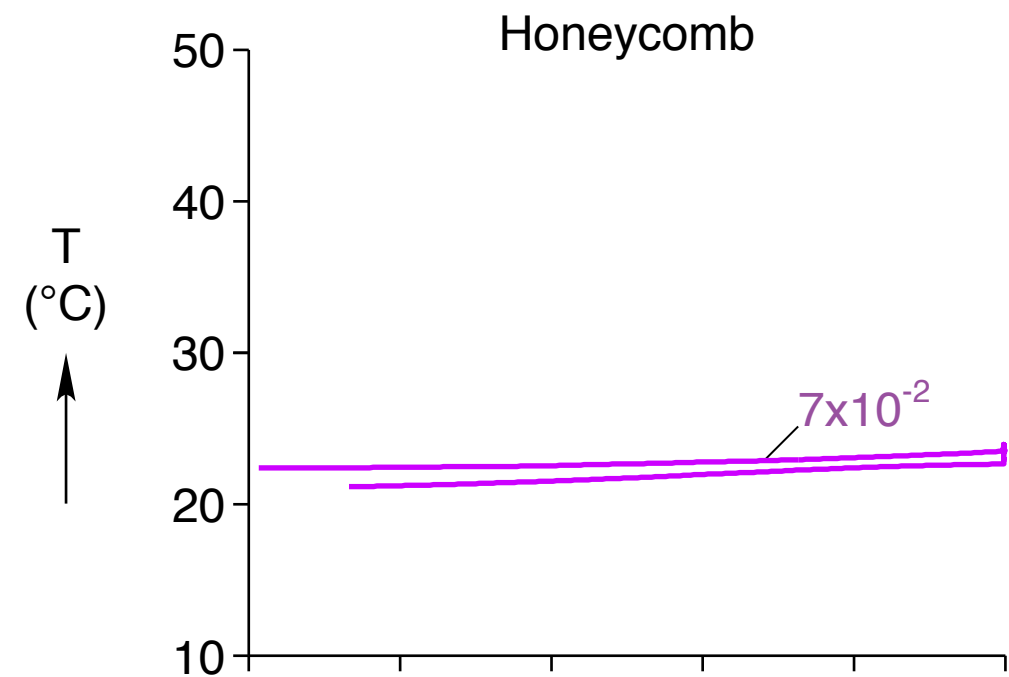
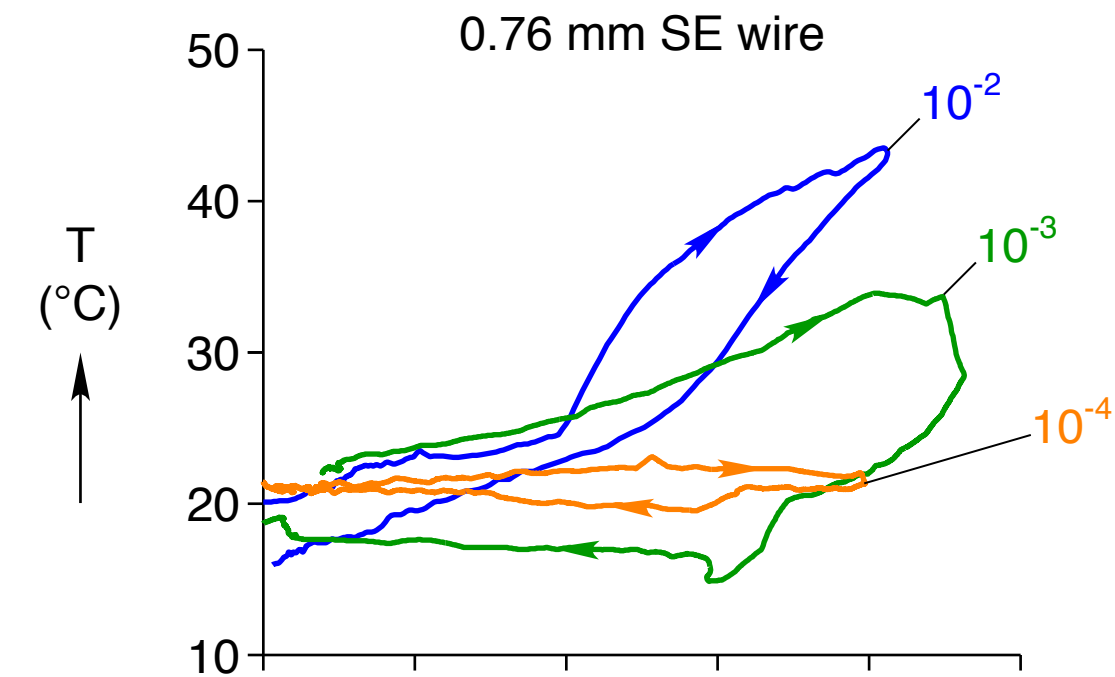


# Incremental Superelastic Responses





# Rate-sensitivity comparison





## APPROACH:

- In-plane temperature- & strain-controlled compression experiments on fabricated NiTi cellular test specimens

## DEMONSTRATED:

- Enhanced superelastic behavior
  - >40% isothermal strain recovery
- Enhanced shape memory effect
  - ~35% load-free strain recovery
- Shape memory thermal lag
  - ~5x improvement over monolithic NiTi
- Rate insensitivity of superelastic behavior
  - >10x improvement over monolithic NiTi

